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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,985	02/20/2002	Nitzan Arazi	2098/11	7971

7590 12/23/2003

DR. MARK FRIEDMAN LTD.
c/o Bill Polkinghorn
Discovery Dispatch
9003 Florin Way
Upper Marlboro, MD 20772

EXAMINER

ZEWDU, MELESS NMN

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 12/23/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/077,985

Applicant(s)

ARAZI ET AL.

Examiner

Meless N Zewdu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) None is/are allowed.
- 6) ☒ Claim(s) 1-5 and 12 is/are rejected.
- 7) ☒ Claim(s) 6-11 is/are objected to.
- 8) ☒ Claim(s) None are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

1. This action is the first on the merit of the instant application.
2. Claims 1-12 are pending in this action.

Drawings

The drawings are objected to because some the labels on the figures (e.g. figs. 6, 7) are so tiny to read. The drawings are also objected because of lack of uniformity in the sizes of the labels. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Figure 1, which is described as "exemplary, overall communication system" in the specification (see page 15, lines 8-9) should be designated by a legend such as -- Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Farwell et al. (Farwell) (EP 0 594 354 A2).

As per claim 1: a method for detecting a mobile unit by a base station, wherein frequency-hopping is used to communicate between base station and mobile units reads on abstract; col. 2, lines 8-26), comprising:

at a base station that is connected to a mobile unit, periodically yielding a hop reads on '354 (see abstract; col. 2, lines 8-26; col. 3, lines 18-25, 31-40).

during the hop which has been yielded by the base station connected with the mobile unit, communicating with the mobile unit from at least one neighboring base station reads on '354 (see col. 4, lines 1-58, particularly lines 44-58).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farwell in view of Moldavsky et al. (Moldavsky) (US 5,115,463).

As per claim 2: claim 2 recites, at neighboring base stations that are not close to each other, using the same hop to communicate with the mobile unit and at neighboring base stations which are close to one another, using different hops to communicate with the

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mobile unit. Farwell does not explicitly teach about In other words the feature of claim 2 is directed to frequency hops channels reuse. But, Farwell does not explicitly teach about the use of same frequency hops for far apart stations and different frequency hops for neighboring stations, as claimed by applicant. However, in a related field of endeavor, Moldavsky teaches about extended cordless telephone system wherein frequency hopping occurs 75 times per second and reuse channels not less than 40 hops (see col. 15, lines 1-11). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply Moldavsky's frequency hopping channels reuse system to that of Farwell for the advantage of extending the cordless phone service (see col. 2, lines 4-27).wherein

Claims 3-5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farwell in view of Grounds et al. (Grounds) (US 6,510,381 B2).

As per claim 3: in a wireless communication system comprising a base station connected with a mobile unit reads on '354 (see abstract; col.2, lines 8-26), a method of detecting a handset by at least one base station which is waiting for the mobile unit to enter its coverage area reads on '354 (see col. 4, lines 1-9), comprising:

from the at least one base station waiting for the mobile unit to enter its coverage area reads on '354 (see col. 4, lines 1-9).

at the base station waiting for the mobile unit to enter its coverage area reads on '354 (see col. 4, lines 1-58, particularly, lines 1-9). But, Farwell does not explicitly teach about a base station connected with the mobile unit, sending a PING command to the mobile unit and receiving an ECHO reply from the mobile unit, as claimed by applicant.

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However, in a related field of endeavor, Grounds teach that a wireless phone can be configured to receive messages sent by a server (which could be or include a base station) and to direct those messages back to the processor using ECHO PING message protocol (see col. 6, lines 12-19). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Farwell's mobile unit with ECHO PING messaging protocol for the advantage of enabling the mobile unit exchange internet/network management protocol messages with the internet or a network, as taught by Grounds.

As per claim 4: method, further comprising:

From the base station waiting for the mobile unit to enter its coverage area reads on '354 (col. 4, lines 1-9, lines 39-58). When the references are combined as shown in the rejection of claim 3, any base station, desired to do so, will be able to send a PING command/message during a time interval that the base station connected with the mobile unit has yield. This is because a mobile unit on the process of handoff can communicate at least with two base stations simultaneously.

As per claim 5: method further comprising:

At each base station receiving the ECHO response, measuring the quality of the ECHO response and reporting the quality measurements to a switching connected to the base stations reads on '354 (see col. 4, lines 1-58, particularly lines 1-9, lines 44-58). As shown above, when the references are combined, the mobile station will be able to send ECHO signal in response to the PING command/message.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farwell as applied to claim 3 above, and further in view of Lu et al. (Lu) (US 6,212,395 B1).

As per claim 12: but, Farwell does not explicitly teach about a wireless communication system that comprises a wireless private branch exchange (WPBX) handling calls from mobile units comprising handsets, as claimed by applicant. However, in a related field of endeavor, Lu teaches a wireless communication system comprising wireless/cellular private branch exchange (cPBX) (see abstract; figs 5A, 12; col. 2, line 58-col. 3, line 46; col. 9, lines 36-67). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Farwell with that of Lu for the advantage of providing mobility management for the first plurality of/(cordless) mobile stations (see col. 3, lines 13-22).

Allowable Subject Matter

Claims 6-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

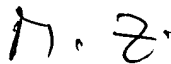
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N Zewdu whose telephone number is (703) 306-5418. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

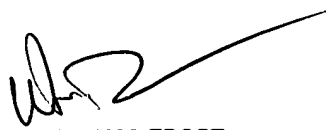
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Meless Zewdu



Examiner

12 December 2003



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600